

April 27, 2015

Natural Gas Trends

Highlights

Permian production up despite rig count drop

Permian Basin gas production climbed in the month of April, approaching levels not seen since the boom days of the 1970s, in spite of a decline in the number of drilling rigs operating in the basin. Bentek data show Permian Basin sample production receipts have reached a new high of 2.5 Bcf/d in April, a 130 MMcf/d build over February and up 420 MMcf/d over last year. This increased output occurred despite a substantial drop in drilling activity which has seen the number of active rigs in the basin fall to 274 as of April 17, down 51% from highs reached last October.

The growth in Permian production was shared across both the Delaware and Midland Basins. Delaware Basin production rose by 65 MMcf/d, or 5%, from February, and Midland Basin production rose by 55 MMcf/d, or 6%, compared with February. There also has been a small resurgence in production in Permian New Mexico, which lies outside the Delaware, where output increased by 8 MMcf/d, or 42%, from February.

Production growth result of high-grading

Maintained production growth in the Permian is largely the result of high-grading activities, where producers focus on their best and most productive acreage. Producers have responded to lower oil prices by substantially reducing vertical drilling rigs. Vertical rigs operating in the basin have fallen to 64 as of April 17, a 70% decline since October, whereas the decline in the number of horizontal rigs was only half as steep, falling to 205 as of April 17, a decline of 30% since October.

Also, the horizontal rigs that remain operational are those that have the highest efficiency and have targeted the most easily attainable resources. This increased focus on efficiency has been reflected in substantial drop in average drilling times observed for horizontal wells during the first quarter of this year, which has fallen to 21 days compared with 27 days in 2014, a 23% improvement. Despite these gains in efficiency, there remains a looming downside risk to production. Producers have begun to build a backlog of uncompleted wells to withhold production from the market while prices remain low.

Anecdotal evidence suggests that well completions will fall between 80% and 90% during 2015, down from Bentek's base case production assumption wherein all drilled wells are completed.

Concho resources, the largest operator in the Permian Basin with 23 active rigs, said in its Q4 earnings call that it plans to run a backlog of uncompleted wells about one and a half to two times the number of rigs it has operating (Concho plans to operate 26 rigs in 2015 implying a backlog of roughly 40-50 wells). Apache Corporation also noted in its Q4 earnings call that its backlog of uncompleted wells stands at roughly 200 wells. But even if well completions fall to 80% in 2015, Permian gas production is expected to remain above last year's levels, albeit with a small reduction from peak levels this April. Under the 90% scenario, Bentek expects that Permian Basin gas production will continue to grow, breaking into new high territory in Q4 2015.

Source: Platts Gas Daily

Data

- May 2015 Natural Gas Futures Contract (as of April 24), NYMEX at Henry Hub closed at \$2.531 per million British thermal units (MMBtu)
- May 2015 Light, Sweet Crude Oil Futures Contract WTI (as of April 24), closed at \$57.15 per U.S. oil barrel (Bbl.) or approximately \$9.85 per MMBtu

Last week: Texas warmer than normal last week

For the week beginning 4/19/15 and ending 4/25/15, heating degree days (HDD) were lower than normal (warmer) on average for the week and lower than normal (warmer) for the year to date for most Texas cities shown.

Source: www.cpc.ncep.noaa.gov

HEATING DEGREE DAYS (HDD)				
City or Region	Total HDD for week ending 4/25/15	*Week HDD + / - from normal	Year-to-date total HDD	* YTD % +/- from normal
Amarillo	39	-18	3708	-11%
Austin	4	-3	1964	20%
DFW	12	-1	2376	1%
El Paso	0	-16	2027	-20%
Houston	0	-7	1460	-4%
SAT	0	-7	1487	-5%
Texas**	10	-1	2045	3%
U.S.**	76	7	4248	-1%

* A minus (-) value is warmer than normal; a plus (+) value is cooler than normal. NOAA uses 65° Fahrenheit as the 'normal' basis from which HDDs are calculated.
** State and U.S. degree days are population-weighted by NOAA.

-999 = Normal Less Than 100 or Ratio Incalculable

Last week: U.S. natural gas storage at 1,629 Bcf

For the week ending 4/17/2015 working gas in storage increased from 1,539 Bcf to 1,629 Bcf. This represents an increase of 90 Bcf from the previous week. Stocks were 737 Bcf higher than last year at this time and 101 Bcf below the 5 year average of 1730 Bcf.

Source: <http://ir.eia.gov/ngs/ngs.html>

U.S. WORKING GAS IN STORAGE				
Region	Week ending 4/17/15	Prior week	One-week change	Current Δ from 5-YR Average (%)
East	560	519	41	-22.8%
West	357	353	4	27.5%
Producing	712	667	45	-1.8%
Lower 48 Total	1,629	1,539	90	-5.8%

Lower 48 states, underground storage, units in billion cubic feet (Bcf)

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Last week: U.S. gas rig count down for the week

The gas rig count for the U.S. was up eight for the week and down 98 when compared to twelve months ago. The total rig count for the U.S. was down 22 from last week and down 929 when compared to twelve months ago. The total rig count includes both oil and natural gas rotary rigs.

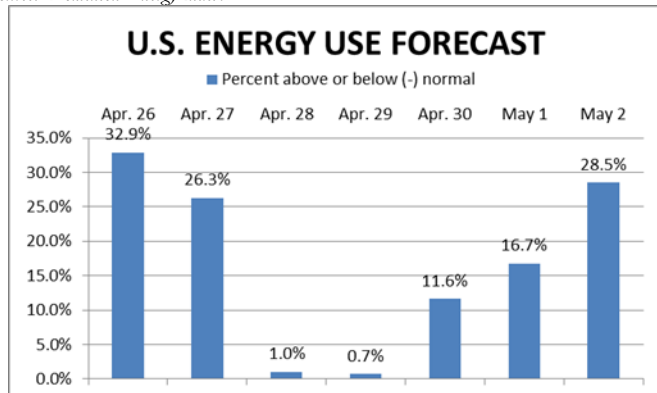
Source: Baker Hughes

BAKER HUGHES ROTARY RIG COUNT				
	As of 4/24/2015	+/- prior week	Year ago	+/- year ago
Texas	393	-19	894	-501
U.S. gas	225	8	323	-98
U.S. oil	703	-31	1534	-831
U.S. total	932	-22	1861	-929
Canada	79	-1	168	-89

This week: U.S. energy above average this week

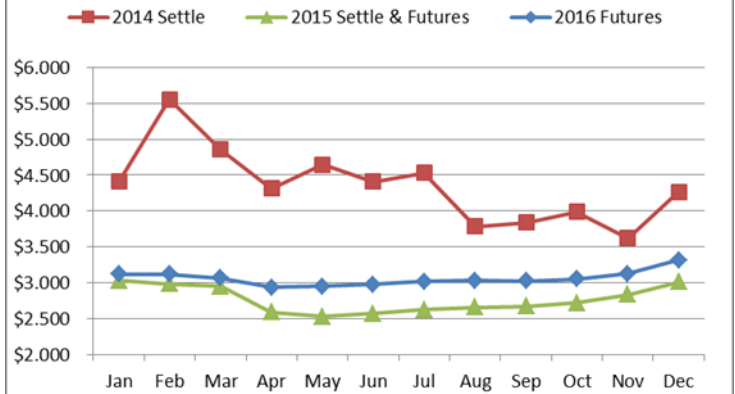
U.S. energy use is predicted to be above average this week, according to the Dominion Energy Index, as shown below. Dominion forecasts total U.S. residential energy usage, a component of which is natural gas.

Source: Dominion Energy Index

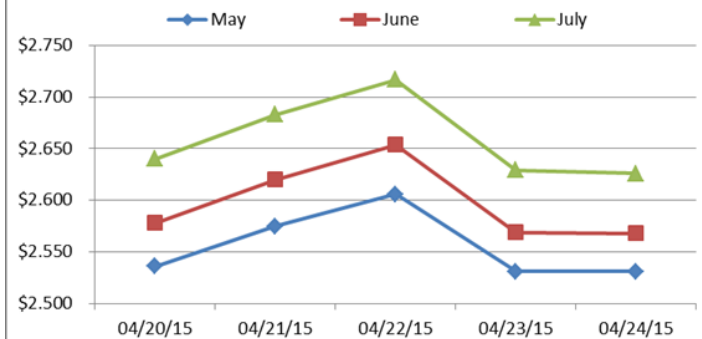


2015 prices. Natural gas prices for 2015, shown below in green, are the NYMEX settlement prices for Jan.-April and futures prices for the remainder of the year.

NYMEX NATURAL GAS PRICES: 2014 - 2016



LAST WEEK: NYMEX HENRY HUB FUTURES PRICES



NATURAL GAS PRICE SUMMARY AS OF 4/25/2015

	This Week	+/- Last Week	+/- Last Year	12-Month Strip Avg.
US May futures				
NYMEX	\$2.531	-\$0.103	-\$2.324	\$2.765